Gravitational Geometry and Dynamics Group Seminar

Wed. 28th June '23 On Campus at 11h00

Dynamical l-boson stars

Juan Carlos Degollado

Universidad Nacional Autonoma de Mexico

Zoom meeting ID 962 2413 8340

passcode: ask to annulli@ua.pt – herdeiro@ua.pt

In this talk I will review some properties of solutions to the static, spherically symmetric Einstein-Klein-Gordon system for a collection of an arbitrary odd number N of complex scalar fields with an internal U(N) symmetry and no self-interactions known as l-boson stars. These solutions are compact, globally regular, configurations of self-gravitating boson fields characterized, besides the mass of the field, by an angular momentum number. I will describe some of their properties in the large l limit and show that by using the semiclassical gravity approximation and a single real scalar field in a spherically symmetric spacetime, it is possible to get a more general set of solutions representing boson stars.

https://videoconfcolibri.zoom.us/j/96224138340?

pwd=YkZUMGlLb0dqVjcxOVpXMTFVMTBXQT09

about us gravitation.web.ua.pt

fct Fundação para a Ciência e a Tecnologia

Gr@v

MSCA RISE